

(19) Kenya Industrial Property Institute

(11) Utility model Number: 220

(24) Registration date: 17/04/2018

(12) UTILITY MODEL

(21) Application Number: 2017/863

(73) Owner:

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY of P. O. BOX 62000-00200, NAIROBI, Kenya

(22) Filing Date: 11/10/2017

(72) Inventors:

DENNIS MICHAEL MWASELA, P.O. BOX 5-80303, WERUGHA, Kenya and FELIX MAITHYA MBEVI, P. O. BOX 62000-00200, NAIROBI, Kenya

(74) Agent/address for correspondence:
JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND
TECHNOLOGY,
P. O. BOX 62000-00200, NAIROBI, Kenya

(51) Int.Cl.2016.01: G 06F 3/00

(54) Title: HAND GESTURE AND SIGN LANGUAGE RECOGNITION DEVICE

(57) Abstract: The present invention discloses a device for recognition of hand gesture and sign language 5 comprising a technology that is adapted to read up sign language from a vocally disabled person and translates it to audio that can be understood by the other party in the conversation. This is made possible by use of gloves that the disabled person(s) puts on that is fitted with relevant sensors that detect the gestures. This information is then processed analyzed by an onboard processor. The processed data is then compared with existing sign language 10 information found onboard database, when the gesture is identified, an equivalent audio file is generated and then broadcasted as audio to the listening party. In a case where the gesture made is not recognized after searching in the local database, the gesture information is broadcasted via wireless network to a central database which might have updated information to identify the gesture. The identified gesture is then transferred back to the client glove that had made the 15 request for gesture to be broadcasted as audio as in Fig. 2D below.

